ENVIRONMENTAL CHEMISTS

Date of Report: 06/25/03 Date Received: 06/19/03

Project: Metro Self Monitor, PO# M91086, F&BI 306178

Date Extracted: 06/24/03 Date Analyzed: 06/24/03

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	Zinc
Laboratory ID				
M91086	0.11	0.10	0.13	0.09
306178-01				
filogida albi.				
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 06/25/03 Date Received: 06/19/03

Project: Metro Self Monitor, PO# M91086, F&BI 306178

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 306108-01 (Duplicate)

							14, 14, 1	Relative			
1		Reporting		Sample	\mathbf{p}	uplicat	te	Percent	Acce	eptan	ce 🖫
	Analyte	Units		Result	VI 330 0	Result	\mathbf{L}	ifference	Cr	iteria	
	Chromium	mg/L (ppm)	N 14	0.13		0.15		14	C)-20	410
	Copper	mg/L (ppm)		0.16		0.15		6	C)-20	144
	Nickel	mg/L (ppm)		0.12		0.12		0	C	-20	
	Zinc	mg/L (ppm)		< 0.05		< 0.05		nm	C)-20	
					The second of						

Laboratory Code: 306108-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery Acceptance
Analyte	Units	Level	Result	MS	Criteria
Chromium	mg/L (ppm)	2	0.13	91	80-120
Copper	mg/L (ppm)	2	0.16	94	80-120
Nickel	mg/L (ppm)	4	0.12	95	80-120
Zinc	mg/L (ppm)	2	< 0.05	102	80-120

Laboratory Code: Laboratory Control Sample

	Reporting	Spike 9	% Recov	ery Acceptance
Analyte	Units	Level	LCS	Criteria
Chromium	mg/L (ppm)	2	93	80-120
Copper	mg/L (ppm)	2	93	80-120
Nickel	mg/L (ppm)	4	94	80-120
Zinc	mg/L (ppm)	2	94	80-120

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

June 25, 2003

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on June 19, 2003 from the Metro Self Monitor, PO# M91086, F&BI 306178 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Charlene Morrow

Charlene Morrow

Chemist

Enclosures ACU0625R.DOC

ENVIRONMENTAL CHEMISTS

James Eterna Report: 06/25/03

Charleng Merrore i Ved: 06/19/03
Yeleng Araykina, M.S.
Bradley T. Benson, B.S.
Kurt Johnsof, St. Sacted: 06/24/03

Date Analyzed: 06/24/03

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	<u>Copper</u>	Nickel	<u>Zinc</u>
Laboratory ID				
M91086 306178-01	0.11	0.10	0.13	0.09
Method Blank	<0.05	<0.05	<0.05	<0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 06/25/03 Date Received: 06/19/03

Project: Metro Self Monitor, PO# M91086, F&BI 306178

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 306108-01 (Duplicate)

원에, 다양, 다양, 마래, 마라 스타트 스타트 교육도 스	Relative
Reporting Sample Dup	licate Percent Acceptance
Analyte Units Result Re	sult Difference Criteria
Chromium mg/L (ppm) 0.13 0.	.15 14 0-20
Copper mg/L (ppm) 0.16 0.	.15 6 0-20
Nickel mg/L (ppm) 0.12 0.	.12 0 0-20
Zinc mg/L (ppm) <0.05 <0	0.05 nm 0-20

Laboratory Code: 306108-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery Acceptance
Analyte	Units	Level	Result	MS	Criteria
Chromium	mg/L (ppm)	2	0.13	91	80-120
Copper	mg/L (ppm)	2	0.16	94	80-120
Nickel	mg/L (ppm)	4	0.12	95	80-120
Zinc	mg/L (ppm)	2	< 0.05	102	80-120

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recov	ery A	Acceptanc	e
Analyte	Units	Level	LCS	5343	Criteria	
Chromium	mg/L (ppm)	2	93		80-120	1. %
Copper	mg/L (ppm)	2	93		80-120	
Nickel	mg/L (ppm)	4	94		80-120	
Zine	mg/L (ppm)	2	94		80-120	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

306178

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SAMPLE CHAIN OF CUSTODY

CM 04/19/03 AII

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Send Report To G. Thompson				TURNAROUND TIME															
Company ALASKAN COFFER WORKS			PROJ.	PROJECT NAME/NO. MESTRO SECR PO# RUSH_ Rush charges authorized by:															
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City, State, ZIP SEAT			34	REMA	RKS					J.						Disp	ose af	LE DISP ter 30 da mples	
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Sample ID	Lab ID	Date	Time	Samp	le Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	CR CUNE 22					1	Votes
M91086	01	6/8/03	7:30	1	20]								•				7	
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ENVIRONMENTAL CHEMISTS

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June 25, 2003

DUPLICATE COPY

INVOICE #03ACU0625-1

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M91086, F&BI 306178 - Results of testing requested by Gerry Thompson for material submitted on June 19, 2003.

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

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